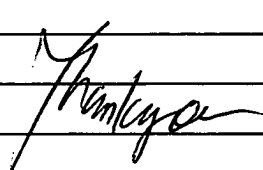


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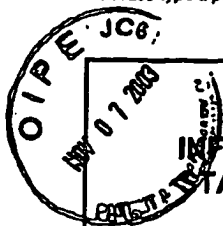
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Application No. <u>10/040,948</u>	Prepared by <u>NPB</u>	Tracking Number <u>05881120</u>	
Examiner-GAU <u>Whitmore-2812</u>	Date <u>8/11/04</u>	Week Date <u>12/29/03</u>	
	No. of queries <u>4</u>	<u>1FW</u>	

JACKET			
a. Serial No.	f. Foreign Priority	k. Print Claim(s)	p. PTO-1449
b. Applicant(s)	g. Disclaimer	l. Print Fig.	q. PTOL-85b
c. Continuing Data	h. Microfiche Appendix	m. Searched Column	r. Abstract
d. PCT	i. Title	n. PTO-270/328	s. Sheets/Figs
e. Domestic Priority	j. Claims Allowed	o. PTO-892	t. Other

SPECIFICATION	MESSAGE
a. <u>Page Missing</u>	① PTO-1449: (7 pages) please either initial or line through citations (copy provided for reference)
b. Text Continuity	
c. Holes through Data	
d. Other Missing Text	② Claim 8 (original claim 41) is missing in claim PTO - claim sets.
e. Illegible Text	
f. Duplicate Text	③ Original claim pages are missing.
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h. Sequence Listing	
i. Appendix	
j. Amendments	
k. Other	
	
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CLAIMS	RESPONSE
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b. Improper Dependency	
c. Duplicate Numbers	
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Substitute for form 1449A/PTO				Application Number	10/040,948
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)				Filing Date	1/5/02
				First Named Inventor	Steven T. Ig
				Group Art Unit	2812
				Examiner Name	Stacy A. Whitmore
Sheet	1	of	6	Attorney Docket Number	SPLX.P0025

U.S. PATENT DOCUMENTS					
Examiner's Initials	Cite No. <sup>1</sup>	U.S. Patent Document Number Kind Code <sup>2</sup> (if known)	Date of Publication MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	1.	2001/0009031	A1	07-19-2001	Nitta et al.
	2.	4,593,363		06-03-1986	Burstein et al.
	3.	5,267,176		11-30-1993	Antreich et al.
	4.	5,566,078		10-15-1996	Ding et al.
	5.	5,587,923		12-24-1996	Wang
	6.	5,618,744		04-08-1997	Suzuki et al.
	7.	5,635,736		06-03-1997	Funaki et al.
	8.	5,637,920		06-10-1997	Loo
	9.	5,640,327		06-17-1997	Ting
	10.	5,784,289		07-28-1998	Wang
	11.	5,798,936		08-25-1998	Cheng
	12.	5,838,583		11-1998	Varadarajan et al.
	13.	5,980,093		11-09-1999	Jones et al.
	14.	6,070,108		05-30-2000	Andreev et al.
	15.	6,150,193		11-21-2000	Glenn
	16.	6,209,123	B1	03-27-2001	Maziasz et al.
	17.	6,219,832	B1	04-17-2001	Buzbee
	18.	6,249,902	B1	06-19-2001	Igusa et al.
	19.	6,253,363	B1	06-26-2001	Gasarov et al.
	20.	6,295,634	B1	09-25-2001	Matsumoto
	21.	6,307,258		10-23-2001	Chiang et al.

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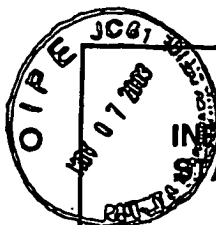
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<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)				Filing Date	1/5/02
				First Named Invent r	Stev n Telg
				Group Art Unit	2812
				Examiner Name	Stacy A. Whitmore
Sheet	2	of	6	Attorney Docket Number	SPLX.P0025

U.S. PATENT DOCUMENTS						
	22.	6,316,838	B1	11-13-2001	Ozawa et al.	
	23.	6,324,674	B2	11-27-2001	Andreev et al.	
	24.	6,324,675	B1	11-27-2001	Dutta et al.	
	25.	6,327,693	B1	12-04-2001	Cheng et al.	
	26.	6,330,707		12-11-2001	Shinomiya et al.	
	27.	6,407,434	B1	06-18-2002	Rostoker et al.	
	28.	6,415,422	B1	07-02-2002	Mehrotra et al.	
	29.	6,442,743	B1	08-27-2002	Sarrafzadeh et al.	
	30.	6,448,591	B1	09-10-2002	Juengling	
	31.	6,473,891	B1	10-29-2002	Shively	
	32.	6,480,991	B1	11-12-2002	Cho et al.	
	33.	6,490,713	B2	12-03-2002	Matsumoto	
	34.	6,546,540	B1	04-08-2003	Igarashi et al.	
	35.	6,557,145	B2	04-29-2003	Boyle et al.	
	36.	6,567,967	B2	05-20-2003	Greidinger et al.	

FOREIGN PATENT DOCUMENTS								
Examiner Initials	Cite No. <sup>1</sup>	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>2</sup>
		Office <sup>3</sup>	Number <sup>4</sup>	Kind Cod (if known)				
	37.	JP	411296560	A	Matsumoto et al.	10-29-1999	with English translation of Abstract;	
	38.	JP	2000-82743	A	Igarashi et al.	03-21-2000	with Japanese Patent Office's English translation of Abstract; and with English	√

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<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> (use as many sheets as necessary)				Filing Dat	1/5/02
				First Named Inv nt r	Steven Telg
				Group Art Unit	2812
				Examiner Name	Stacy A. Whitmore
Sheet	3	of	6	Attorney Docket Number	SPLX.P0025

FOREIGN PATENT DOCUMENTS							
						translation of the application.	
39.	JP	H03-173471	A	Tawada et al.	07-26-1991	with Japanese Patent Office's English translation of Abstract; and with English translation of the application.	✓
40.	JP	H05-243379	A	Masako Kubota	09-21-1993	with Japanese Patent Office's English translation of Abstract; and with English translation of the application.	✓
41.	JP	H05-102305	A	Akihiro Sato	04-23-1993	with Japanese Patent Office's English translation of Abstract; and with English translation of the application.	✓
42.	JP	H07-86407	A	Shinpei Miura	03-31-1995	with Japanese Patent Office's English translation of Abstract; and with English translation of the application.	✓
43.	JP	H09-162279	A	Masaaki Yoshida	06-20-1997	with Japanese Patent Office's English translation of Abstract; and with English translation of the application.	✓

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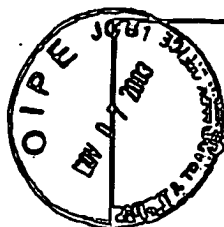
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**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

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Application Number			10/040,948		
Filing Date			1/5/02		
First Named Inventor			Steven T Ig		
Group Art Unit			2812		
Examiner Name			Stacy A. Whitmore		
Attorney Docket Number			SPLX.P0025		
Sheet	4	of	6		

**FOREIGN PATENT DOCUMENTS**

**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	44.	Ahuja, R. et al., Faster Algorithms for the Shortest Path Problem, Journal of the Association for Computing Machinery, vol. 37, No. 2, April 1990, pp. 213-223.	
	45.	Brady, L. et al., Channel Routing on a 60° Grid, extended abstract, pp. 956-931.	
	46.	Brambilla, A. et al., Statistical Method for the Analysis of Interconnects Delay in Submicrometer Layouts, IEEE, 8/2001, pp. 957-966.	
	47.	Carothers, K., A Method of Measuring Nets Routability for MCM's General Area Routing Problems, 1999, pp. 186-192.	
	48.	Chen, H. et al., Physical Planning of On-Chip Interconnect Architectures, 2002, IEEE, International Conference, pp. 30-35.	
	49.	Cheng, K. et al., Manhattan or Non Manhattan? A Study of Alternative VLSI Routing Architectures, pp 47-52, 2000.	
	50.	Cheng, K., Steiner Problem in Octilinear Routing Model, a Thesis Submitted for the Degree of Master of Science, National University Singapore, 1995, pp. 1-122.	
	51.	Chip Model with Wiring Cost Map, August 1983, IBM Technical Disclosure Bulletin, vol. 26, iss. 3A, pp. 929-933.	
	52.	Cong, J. et al., Efficient Heuristics for the Minimum Shortest Path Steiner Arborance Problem with Applications to VLSI Physical Design, Cadence Design Systems and UCLA Computer Science Department, pp.88-95.	
	53.	Cong, J. et al., Performance-Driven Multi-Layer General Routing for PCB/MCM Designs, UCLA Computer Science Department, 1998, pp. 356-361.	
	54.	Enbody, R. et al., Near-Optimal n-Layer Channel Routing, 23 <sup>rd</sup> Design Automation Conference, 1986, pp. 708-714.	
	55.	Fang, S. et al., Constrained Via Minimization with Practical Considerations for Multi-Layer VLSI/PCB Routing Problems, 28 <sup>th</sup> ACM/IEEE Design Automation Conference, 1991, pp. 60-65.	
	56.	Horn, I. et al., Estimation of the Number of Routing Layers and Total Wirelength in a PCB Through Wiring Distribution Analysis, 1996, pp. 1-6.	

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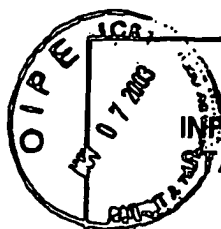
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Substitute for form 1449A/PTO				Application Number	10/040,948
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)				Filing Date	1/5/02
				First Named Inventor	Steven Teig
				Group Art Unit	2812
				Examiner Name	Stacy A. Whitmore
Sheet	5	of	6	Attorney Docket Number	SPLX.P0025

FOREIGN PATENT DOCUMENTS		
57.	Hong, X. et al., Performance-Driven Steiner Tree Algorithms for Global Routing, 30 <sup>th</sup> ACM/IEEE Design Automation Conference, 1993, pp. 177-181.	
58.	Khoo, K. et al., An Efficient Multilayer MCM Router Based on Four-Via Routing, 30 <sup>th</sup> ACM/IEEE Design Automation Conference, 1993, pp. 590-595.	
59.	Lillis, J. et al., Table-Lookup Methods for Improved Performance-Driven Routing, 1998, pp. 368-373.	
60.	Lipski, W. et al., A Unified Approach to Layout Wirability, Mathematical Systems Theory, 1987, pp. 189-203.	
61.	Lodi, E. et al., A Preliminary Study of a Diagonal Channel-Routing Model, Algorithmica, 1989, pp.585-597.	
62.	Lodi, E. et al., Lecture Notes in Computer Science, A 4d Channel Router for a Two Layer Diagonal Model, pp. 464-476, July 1988.	
63.	Naclerio, N. et al., Via Minimization for Gridless Layouts, 24 <sup>th</sup> ACM/IEEE Design Automation Conference, 1987, pp. 159-165.	
64.	Nam, G. et al, Satisfiability-Based Layout Revisited: Detailed Routing of Complex FPGAs Via Search-Based Boolean SAT, 1999, pp. 167-175..	
65.	Oh, J. et al., Constructing Lower and Upper Bounded Delay Routing Trees Using Linear Programming, 33 <sup>rd</sup> Design Automation Conference, 1996.	
66.	Partitioning Logic on to Graph Structure, IBM Technical Disclosure Bulletin, February 1990, vol. 32, iss. 9A, pp. 469-475.	
67.	Phillips, N., Channel Routing by Constraint Logic, Department of Computer Science Southern Illinois University, ACM, 1992.	
68.	Takashima, Y. et al, Routability of FPGAs with Extremal Switch-Block Structures, IEICE Trans. Fundamentals, vol. E81-A, No. 5, May 1998, pp. 850-856.	
69.	Thakur, S. et al., Algorithms for a Switch Module Routing Problem, 1994, pp. 265-270.	
70.	Tseng, H., Timing and Crosstalk Driven Area Routing, pp. 378-381.	

Examiner Signature	Date Considered
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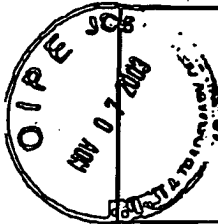
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				First Named Inventor	Stev n Teig
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				Examiner Name	Stacy A. Whitmore
Sheet	6	of	6	Attorney Docket Number	SPLX.P0025

FOREIGN PATENT DOCUMENTS			
	71.	Wang, D., Novel Routing Schemes for IC Layout, Part I: Two-Layer Channel Routing, 28 <sup>th</sup> ACM/IEEE Automation Conference, 1991, pp. 49-53.	
	72.	Wang, M. et al., Modeling and Minimization of Routing Congestion, Jan. 2000, IEEE proceedings of ASP-DAC, Asia and South Pacific, pp. 185-190.	
	73.	Wood, G. et al., FPGA Routing and Routability Estimation Via Boolean Satisfiability, Department of Electrical and Computer Engineering Carnegie Mellon University, Pittsburgh, PA, pp. 119-125.	
	74.	Zhang, C.X. et al., Floorplan Design Using a Hierarchical Neural Learning Algorithm, IEEE, 6/1991. pp. 2060-2063.	
	75.	Zhou, H. et al., An Optimal Algorithm for River Routing with Crosstalk Constraints, 1996.	
	76.	Zhou, H. et al., Global Routing with Crosstalk Constraints, Department of Computer Sciences, University of Texas, 1998, pp. 374-377.	
	77.	Zhou, H. et al., Optimal River Routing with Crosstalk Constraints, ACM Transactions on Design Automation of Electronic Systems, vol. 3, No. 3, July 1998, pp. 496-514.	

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<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)				Filing Date	1/5/02
				First Named Inventor	St v n T ig
				Group Art Unit	2812
				Examiner Name	Stacy A. Whitmore
Sheet	1	of	1	Attorney Docket Number	SPLX.P0025

U.S. PATENT DOCUMENTS						
Examiner* Initials	Cite No.†	U.S. Patent Document		Date of Publication MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code* (if known)			
	1.	2002/0182 844	A1	12-05-2002	Igarashi et al.	
	2.	2003/0053 399	A1	01-02-2003	Igarashi et al.	
	3.	5,663,891		09-02-1997	Bamji et al.	
	4.	5,757,089		05-26-1998	Ishizuka	
	5.	5,889,677		03-30-1999	Yasuda et al.	
	6.	6,128,767		10-03-2000	Chapman	
	7.	6,226,560	B1	05-01-2001	Hama et al.	
	8.	6,519,751	B2	02-11-2003	Sriram et al.	
	9.	6,543,043	B1	04-01-2003	Wang et al.	

NON PATENT LITERATURE DOCUMENTS				
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	10.	Hu, J. et al., A Timing-Constrained Algorithm for Simultaneous Global Routing of Multiple Nets, IEEE/ACM International Conference on Computer Aided Design. ICCAD – 2000. IEEE/ACM Digest of Technical Papers (CAT. NO.00CH37140), Proceedings of International Conference on Computer Aided Design (ICCAD), San Jose, CA, USA, 5-9 Nov. 2000, pp.99-103.		
	11.	Kastner, R. et al, Predictable Routing, IEEE/ACM International Conference on Computer Aided Design. ICCAD – 2000. IEEE/ACM Digest of Technical Papers (CAT. NO.00CH37140), Proceedings of International Conference on Computer Aided Design (ICCAD), San Jose, CA, USA, 5-9 Nov. 2000. pp. 110-113.		

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